

SOYBEAN PLANT PRODUCING SEEDS WITH REDUCED LEVELS OF RAFFINOSE SACCHARIDES AND PHYTIC ACID

5 A soybean enzyme, *myo*-inositol 1-phosphate synthase, whose manipulation results in the alteration of raffinose saccharide, sucrose, phytic acid and inorganic phosphate content of soybean seeds, thus leading to valuable and useful soybean products, has been identified. Soybean lines with decreased capacity for the synthesis of *myo*-inositol 1-phosphate in the tissue of developing seeds in comparison to seeds of other soybean lines, have been developed. As taught herein, reduction of *myo*-inositol 1-phosphate synthase enzymatic activity by any of several means will result in soybean seeds displaying this desirable phenotype.

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